REMARKS

Claims 1-11 are pending in the present application. Claims 1-5 were amended in this response. No new matter was introduced as a result of the amendment. Support for the amendment may be found, for example, on page 12, line 17 - page 13, line 20 of the amended specification.

Claims 1-4 and 7-8 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Maeda* ("Management and Control of Transparent Optical Networks", IEEE Journal on Selected Areas in Communication, Vol. 17, No. 7, September 1998) in view of *Chaudhuri* et al. (US App 2002/0030864A1).

Claims 5-6 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Maeda* ("Management and Control of Transparent Optical Networks", IEEE Journal on Selected Areas in Communication, Vol. 17, No. 7, September 1998) in view of *Chaudhuri* et al. (US App 2002/0030864A1) and further in view of *Ashwood Smith* (US Patent 6,738,354).

Claims 9 was rejected under 35 U.S.C. §103(a) as being unpatentable over *Maeda* ("Management and Control of Transparent Optical Networks", IEEE Journal on Selected Areas in Communication, Vol. 17, No. 7, September 1998) in view of *Chaudhuri* et al. (US App 2002/0030864A1) and *Ashwood Smith* (US Patent 6,738,354) and further in view of *Okamura* (US Patent 6,618,400B1). Applicant respectfully traverses these rejection. Favorable reconsideration is requested.

Specifically, as the Office Action recognizes, *Maeda* does not teach using connection vectors for identifying available WDM transmission channels, as recited in independent claim 1. Furthermore, Applicant submits that *Maeda* also does not disclose finding at least one available WDM transmission channel for setting up a connection from a first node in a first subnetwork to a second node located in a second subnetwork ("between said first optical network node and said network nodes having a wavelength converter") via a node used at the intersubnetwork boundaries providing a wavelength converter ("between said network nodes having a wavelength converter and said Nth optical network node").

Chaudhuri teaches the usage of one vector to identify available WDM transmission channels between two network nodes. When detailed knowledge of wavelength availability is not availble, *Chaudhuri* probes the network to determine an appropriate wavelength choice by

using a probe vector of the same size as the number of wavelengths on the first link at each node along the desired route [0092]. Once the entire route has been traversed, the wavelength availability vector will denote the wavelengths that are available on every link along the route, and the vector is returned to the source OLXC, and a single wavelength is chosen from amongst the available wavelengths [0092]. Thus, *Chaudhuri* only teaches one vector that assists in selecting one channel at the source node. *Chaudhuri* clearly does not disclose selecting "at least one of the available WDM transmission channels in the first connection vector and at least one of the available WDM transmission channels in the second connection vector by at least one of the Nth optical network node and at least on optical network node having a wavelength converter" as required in the amended claims.

Similarly, *Atwood Smith* also selects one available WDM transmission channel at the destination node (see FIG. 3, node 4a), and is completely silent on the feature of applying a first and second connection vector to set up a connection from a source node to a destination node via at least one intermediary node having a wavelength converter.

Applicant maintains that the optical network described in *Chaudhuri* does not utilize wavelength converters as required in the present claims, and is explicitly relied upon in *Maeda* (see p. 1009, section II). Accordingly, Applicant submits that one having ordinary skill in the art would have to teaching, suggestion or motivation to combine the references in the manner suggested in the Office Action.

Notwithstanding the fact that the Office Action dismissed precedent binding the USPTO as "some appeal board and court decisions," the USPTO has not met its burden in establishing obviousness. In making this determination, the question is not whether the differences between the prior art and the claims themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 218 U.S.P.Q. 871 (Fed. Cir. 1983)(emphasis added - see MPEP 2142). By choosing specific features in the analysis to the exclusion of the other features recited in the claims (see, e.g., page3 of Final Office Action, lines 3-5, page 4, paragraph 3, lines 5-8), the Office is improperly relying on hindsight in applying the rejection. The Federal Circuit has held that it is "impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." *In re Fritch*, 23 U.S.P.Q.2d

1780, 1784 (Fed. Cir. 1992). "One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention" *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Applicant maintains the same arguments submitted in the previous response.

Accordingly, Applicants submit that amended claim 1 is allowable over the prior art. As claims 5-6, 9 and 10 depend from claim 1, they are also patentable for the same reasons given above. Applicants respectfully request that a timely Notice of Allowance be issued in this case. If any additional fees are due in connection with this application as a whole, the Examiner is authorized to deduct such fees from deposit account no. 02-1818. If such a deduction is made, please indicate the attorney docket no. (0112740-513) on the account statement.

Respectfully submitted,

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